

# Technical Specifications R-EVO smart<sup>S</sup>

| PARAMETERS                           | SPECIFICATION   |
|--------------------------------------|---|
| Manufacturer                         | OPTIKON 2000 S.p.A.<br>via del Casale di Settebagni, 13 - 00138 Rome - Italy  |
| Model                                | R-Evo smart <sup>®</sup> S  |
| Ref.                                 | 111010  |
| Regulatory compliance                | 93/42/EEC Medical Device Directive (MDD)  |
| Technical standards                  | EN60601-1; EN60601-1-2; EN60601-2-2; EN80601-2-58   |
| <b>ENVIRONMENTAL SPECIFICATIONS</b>  |   |
| Storage and transport                | temperature -10°C - +70°C, humidity 10%-100% (non-condensing), atmospheric pressure 500 - 1060 hPa  |
| Operation                            | temperature range +10°C - +35°C, humidity 30%-75%, atmospheric pressure 900 - 1060 hPa (for maximum vacuum); 810 - 1060 hPa (for vacuum up to 500 mmHg) |
| <b>ELECTRICAL SPECIFICATIONS</b>     |   |
| Input voltage                        | 100-240 VAC   |
| Frequency                            | 50/60 Hz  |
| Required power                       | 200 VA  |
| Fuses                                | 100-240 Volt: T3.15AH 250V  |
| <b>COMPRESSED AIR SPECIFICATIONS</b> |   |
| Air inlet pressure                   | 500 - 800 kPa (72 - 116 PSI; 5 - 8 bar)   |
| Air consumption                      | 32 Normal litre/min   |
| <b>IRRIGATION</b>                    |   |
| Fluid delivery                       | gravity fed (determined by the height of irrigation source) or microprocessor-controlled active infusion  |
| Valves                               | solenoid driven pinch valve   |
| Control                              | system pedal  |
| <b>ASPIRATION</b>                    |   |
| Aspiration pump types                | peristaltic and Venturi   |
| Actuating medium                     | (Venturi pump) pressurized air coming from an external source at 500 - 800 kPa (72 - 116 PSI; 5 - 8 bar)  |
| Default vacuum level                 | user programmable   |
| Available vacuum range               | 5 - 650 mmHg  |
| Default flow rate                    | user programmable   |
| Available flow rate range            | 1 - 65 cc/min (peristaltic only)  |
| Vacuum rise time                     | adjustable on 25 levels (0.5s-12s peristaltic only)<br>adjustable on 2 levels (fast/slow - Venturi only)  |
| Linear aspiration mode               | linear aspiration control, through system pedal, (for vacuum and/or flow) from zero to maximum user programmable  |
| Safety device                        | vacuum sensor, measures the vacuum in the aspiration line   |
| Control                              | system pedal  |
| <b>ANTERIOR VITRECTOMY</b>           |   |
| Handpiece type                       | pneumatically powered guillotine cutter   |
| Cutting mode                         | reciprocating motion  |
| Default cutting rate                 | user programmable   |
| Available cutting rate               | 60 - 5,000 cuts/min<br>120 - 10,000 cuts/min with Twedge™ technology  |
| Actuating medium                     | pressurized air from an external source   |
| Linear cutting mode                  | linear cutting rate from 0 to preset controlled via system pedal  |
| Control                              | system pedal  |
| <b>DIATHERMY</b>                     |   |
| Type                                 | bipolar generator - the generator stops when the RF power supply is not needed  |
| Operating frequency                  | 2 MHz   |
| Nominal power                        | 9 W (200 Ohm load)  |
| No load max. voltage                 | 100 V   |
| Default power                        | user programmable   |
| Available power                      | 5% - 100%   |
| Linear mode                          | allows the linear control of the DIATHERMY power via system pedal   |
| Handpiece type                       | bipolar microforceps, slim stat pencil eraser, intraocular diathermy pencils  |
| Diathermy cable                      | two conductors, 26 gauges, 75 Ohm, 200V max, steam autoclavable; use only the original diathermy cable  |
| Control                              | system pedal  |

**PHACOEMULSIFIER**

|                |   |
|----------------|---|
| Handpiece type | piezoelectric available with four or six crystals                                   |
| Frequency      | approx. 40 kHz  |
| Tip stroke     | 0 - 100 µm  |
| Power control  | panel or linear control of U/S power via system pedal                               |
| U/S mode       | linear or panel; continuous, pulsed, single burst, multiple burst, continuous burst |
| Occlusion mode | Autolimit, HD pulse   |
| Timer U/S      | 0:00 - 9:59 min - equivalent phaco time display                                     |

**EQUIPMENT CLASSIFICATION ACCORDING TO IEC 60601-1**

|  |   |
|--|---|
| Type of protection against electric shock  | Class I                                       |
| Degree of protection against electric shock:                                       |   |
| Diathermy  | Type BF, floating at high and low frequencies |
| U/S  | Type B  |
| Vitrectomy   | Type BF                                       |
| Degree of protection against harmful water ingress (unit)                          | IPX0  |
| Degree of protection against harmful water ingress (pedal)                         | IPX8  |
| Degree of safety of application in the presence of a flammable anaesthetic mixture | not suitable                                  |

W x D x H:  
43 x 50 x 35 cm

W x D x H (with trolley):  
57 x 74 x 152 cm

Weight:  
17 Kg (60 kg with trolley and pedal)



NOTE:

- 1) The weight and dimensions shown are approximate.
- 2) Specifications are subject to change without notice.